

vehicles;

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cancel.
- c) actuating vehicle restrictors in a roadway to control the parameters of said vehicle to be slowed or stopped to avoid said collision; and
 - d) actuating at least one alarm to alert an operator of said vehicle of said approaching train to avoid such a collision.

21/10. The collision avoidance method of Claim ²⁰~~29~~, wherein said train parameters comprise the presence, position, speed, or direction of the sensed train.

REMARKS

Reconsideration of the present application is respectfully requested in light of the above amendments to the application and the following remarks.

Regarding the Drawings

Attempts have been made to provide more clarity in the labeling of each item and the corresponding reference to that item in the specification.

To prevent collisions the system may use a plurality of vehicle restrictors with each restrictor being individually controllable. The use of different reference characters within a single drawing to designate vehicle restrictors (20a, 20b, etc.) emphasizes the discussion within the specification that each vehicle restrictor is distinct in its operation and location. Where the same reference character (20) is used within a single drawing to designate vehicle restrictors, the vehicle restrictors are discussed generically and the discussion of the specification is focused on other areas of the invention.

Reference character "30" is a generic notation for what the specification describes as a Trigger Sensor or the signals that comes from a Trigger Sensor. Within the same drawing a plurality of identical trigger sensors are designated as 30a, 30b, etc.

Regarding the Specification

The Applicant has amended the specification to provide conformity with the new claim language. The Examiner has indicated that the specification has not been checked to the extent necessary to determine the presence of all possible minor errors. The Applicant has reviewed the specification for errors and made any appropriate corrections. If the specification is considered too lengthy please provide advice regarding the sections that could be deleted without affecting patent content.

Regarding the Claims

Claims 1-19 have been cancelled, and new Claims 20-40 have been added. Currently pending in the application, therefore, are Claims 20-40, of which Claims 20 and 35 are independent.

Claims 1-19 have been rejected under 35 U.S.C. §112, second paragraph, for formal reasons. Claims 1-19 have also been rejected under 35 U.S.C. §103(a) as being unpatentable over Ceseri in view of Welford, or as being unpatentable over the combination of Ceseri and Welford and further in view of Daly, Smith et al., Mendeleev, Thompson, Loeven, and/or Schuster. The Applicant has cancelled Claims 1-19 and added new Claims 20-40 which meet the formal requirements of §112. New Claims 20-40 are distinguishable over the prior art cited in the §103 rejections for the reasons set forth below.

The Welford system does indeed teach an electronically controlled speed bump that is actuated in response to the detection of a speeding vehicle. However, this system is configured to control the speed of only the vehicle whose speed is being monitored, and is not configured to control the speed of additional vehicles who may be moving on a collision course with the speeding vehicle. Thus, the Welford system is not configured to control non-speeding vehicles that are nevertheless at risk of colliding with another vehicle, pedestrian, or train. Also, this system is not configured to alert operators of vehicles or pedestrians who may be moving on a collision course with the speeding vehicle.

The Ceseri system monitors overall traffic flow conditions (i.e., vehicle speed, density, and distribution) and ambient meteorological conditions, and provides visual alarms at certain threshold safety limits based on the overall traffic flow and the current weather conditions. However, the function of this system relates to the *overall* flow of traffic as a whole and not on sensing and responsive measures controlling only selected of a plurality of vehicles as is desirable to avoid collisions. Additionally, while the Ceseri system provides for the detection and notification of traffic accidents, the system is entirely reactive to the occurrence of the accident. This is at least partly because the Ceseri system teaches disposing sensors spaced-apart along a monitored roadside. This sensor arrangement does not allow or is not well suited for sensing and monitoring two or more vehicles disposed on intersecting lines at least one of which vehicles is moving, as is necessary for detecting the likelihood of and avoiding collisions.

The claimed invention, on the other hand, provides a system for sensing the presence, position, speed, and/or direction of a plurality of vehicles, pedestrians, and/or trains, determining beforehand the likelihood of a collision between the sensed vehicles, pedestrians, and/or trains, determining which vehicle should be slowed or stopped to avoid the collision in light of the

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sensed vehicle conditions and the local traffic laws, and actuating vehicle restrictors in the roadway to control the speed of the vehicle or vehicles to be slowed or stopped to avoid the collision. Also, the system may provide for actuating alarms to alert motorists of an approaching vehicle or train to avoid such a collision. Unlike the cited prior art, the claimed invention operates to proactively avoid vehicle-related collisions before they occur, regardless of whether the selectively controlled vehicle is speeding or not, between a plurality of vehicles or between a vehicle, person, and/or train.

There is no suggestion, teaching, or motivation found in Ceseri, Welford nor any other prior art of record, and it would not have been obvious to one of ordinary skill in the art, to modify Ceseri to include sensing the presence, position, speed, or direction of a plurality of vehicles, pedestrians, and/or trains, to add to Ceseri new elements for determining beforehand the likelihood of a collision between the sensed vehicles, pedestrians, and/or trains and for determining which vehicle should be slowed or stopped in light of the sensed vehicle conditions and the local traffic laws, and to combine the same with the electronically controlled speed bump of Welford. For these reasons, the Applicant respectfully submits that independent Claims 20 and 35 are distinguishable over Ceseri, and that such reference neither anticipates nor renders obvious the present invention as claimed in view of Welford or any other prior art of record.

Claims 21-34 are dependent from independent Claim 20 which is believed to be in condition for allowance for the reasons stated above. Therefore, the Applicant respectfully submits that Claims 21-34 are also in condition for allowance.

Claims 36-40 are dependent from independent Claim 35 which is believed to be in condition for allowance for the reasons stated above. Therefore, the Applicant respectfully

submits that Claims 36-40 are also in condition for allowance.

New independent Claims 20 and 35 are believed to be in condition for allowance, and dependent Claims 21-34 and 36-40 are thereby also in condition for allowance. Therefore, the Applicant submits that the new claims overcome the Examiner's rejections and objections and are in condition for allowance, and the Applicant respectfully requests the same. Should the Examiner have questions or suggestions that will put this application in line for allowance, please contact the Applicant as indicated below.

Respectfully submitted,

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